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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,012	10/26/2001	Carlos M. Collazo	020897-000130US	. 8807
20350 7590 06/28/2007 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER			EXAMINER	
			BENGZON, GREG C	
EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834		. ART UNIT	PAPER NUMBER	
			2144	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Summany	10/040,012	COLLAZO, CARLOS M.			
Office Action Summary	Examiner	Art Unit			
	Greg Bengzon	2144			
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from 5. cause the application to become ABANDONF	J. nely filed the mailing date of this communication.			
Status					
1) Responsive to communication(s) filed on 24 A	Responsive to communication(s) filed on <u>24 April 2007</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.				
3) Since this application is in condition for allowa	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4)  Claim(s) 4-10 is/are pending in the application 4a) Of the above claim(s) is/are withdray</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 4-10 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/o</li> </ul>	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex Priority under 35 U.S.C. § 119	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obje	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
<ul> <li>12) ☐ Acknowledgment is made of a claim for foreign</li> <li>a) ☐ All b) ☐ Some * c) ☐ None of:</li> <li>1. ☐ Certified copies of the priority documents</li> </ul>		·(d) or (f).			
<ul> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary (I Paper No(s)/Mail Dat 5)  Notice of Informal Pa 6)  Other:	PTO-413) e			
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#### **DETAILED ACTION**

This application has been examined. Claims 4-10 are pending. Claims 6-10 are submitted as new claims.

### Making Final

Applicant's arguments filed 07/12/2006 have been fully considered but they are not persuasive.

The claim amendments regarding -- 'wherein said LNV and CNV allow a user to analyze network device performance and network resource utilization in a peer-to-peer, real-time relationship' '-- do not overcome the disclosure by the prior art as applied in the prior Office Action, as shown below.

The Examiner is maintaining the rejection(s) for Claims 4-5 using the same grounds for rejection and thus making this action FINAL.

Furthermore the newly submitted claims require a new search and necessitate introducing new grounds for rejection.

#### **Priority**

This application claims benefits of priority from US Provisional application 60243783, filed October 26, 2000.

The effective date of the subject matter in the claims in this application is October 26, 2000.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 7 recites a limitation for 'providing said first composite utilization value capable of being passed directly to a second composite utilization value communicatively coupled to a data record tag; providing a plurality of tags and segments to said first and second composite utilization values'.

The Applicant Specifications do not describe any data record tags and segments.

It is noted that the Applicant has failed to point to the specification in order to show the support for such amendments that have been made to the claims. Therefore, the Examiner will rely on the exact wording of the amended subject matter within the specification to determine proper support for these amendments. A general search for this wording within the specification for 'tags' and 'segments' was not found, therefore, the Examiner submits that the amendments lack proper support within the specification. If the Applicant traverses the Examiner's holding of lack of support for the amendments, the Applicant is requested to specifically point out the specific page and line and/or paragraph numbers and/or figures where such support for these amendments are disclosed within the specification.

# Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 4-5,8-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 4-5, 8-10 are directed towards a method for calculating integer values, said integer reflecting the capacity of the server to receive work loads. The claims are non-statutory as they do not produce any useful and tangible result. The Examiner notes that the integer values by themselves do not accomplish any tangible result, nor are said integer values used to accomplish any tangible result, nor are said integer values embodied in any tangible result.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4,6,8,9,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hafez et al. (US Patent 6513065), hereinafter referred to as Hafez, in view of Strandberg et al. (US Patent 6647412), hereinafter referred to as Strandberg.

Hafez substantially disclosed the invention as follows.

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Hafez disclosed (re. Claim 4) a method for assessing server and network of servers capacity, (Hafez – Column 9 Lines 65) summarized through two integer values representing Local Node Value (LNV) and Composite Node Value (CNV), (Hafez – Column 12 Lines 5-15, Column 15 Lines 45-50) respectively, the method comprising: calculating the LNV of a server as an integer value through a combination of measured counters (Hafez-Column 12 Lines 10-15) at the same point in time (Hafez - Column 12 Lines 45-50), the LNV reflecting the capacity of the server to receive work loads;

Hafez disclosed (re. Claim 4) wherein said LNV and CNV allow a user to analyze network device performance and network resource utilization without requiring a multitier polling data collection process via a central console, (Hafez- Column 6 Lines 25-30, Column 9 Lines 35-40, Column 6 Lines 50-55)

Hafez disclosed that each node may be a console node, and that each node may have its own repository, and that each node may pass metric data to another node (agent to console, agent to repository). Thus with each node acting as a console (Hafez-Column 6 Lines 10-15, 'plurality of consoles') Hafez disclosed an embodiment without requiring a central console.

Hafez does not disclose (re. Claim 4) a method for collecting information about a network's operation comprising using peer-to-peer communication among a plurality of devices in the network to obtain a measure of the network performance. While Hafez disclosed a method for calculating a combination and summarization of node values

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(Hafez - Figure 8a-8b, Column 12 Lines 60-65), Hafez did not disclose (re. Claim 4) calculating the CNV of a beginning server as an integer value through a combination of the LNVs of a subnetwork of servers that begins with the beginning server, the calculation of the CNV including the LNV of the beginning server, the CNV reflecting the capacity of the sub-network beginning with the beginning server to collectively receive workloads.

Hafez did not disclose (re. Claim 4) <u>a peer-to-peer real-time relationship</u>

comprising a peer-to-peer value including said CNV and said LNV and capable of

changing dynamically, in one to many, many to one, and bi-directional relationships

between a plurality of calculated values.

Strandberg disclosed (re. Claim 4) a method for propagating node information through ingress, core, and egress nodes using peer-to-peer communication in a differential network, (Strandberg- Figure 3, Column 1 Lines 55-65, Column 2 Lines 1-10) said node information containing performance parameters such as packet loss, delay rate, queue load, service rate and stability. (Strandberg - Figure 3, Column 3 Lines 1-5). Strandberg disclosed (re. Claim 4) calculating the CNV of a beginning server as an integer value through a combination of the LNVs (Strandberg - Figure 3, Column 3 Lines 1-5) of a subnetwork of servers that begins with the beginning server, the calculation of the CNV including the LNV of the beginning server, the CNV

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reflecting the capacity of the sub-network beginning with the beginning server to collectively receive workloads. (Strandberg – Column 6 Lines 60-65)

Strandberg disclosed (re. Claim 4) ) <u>a peer-to-peer real-time relationship</u>

<u>comprising a peer-to-peer value including said CNV and said LNV and capable of changing dynamically, in one to many, many to one, and bi-directional relationships</u>

(Strandberg-Column 6 Lines 30-40) <u>between a plurality of calculated values</u>.

(Strandberg – Column 6 Lines 60-65)

Hafez and Strandberg are analogous art because they present concepts and practices regarding the capture and assessment of network performance measurements. (See Strandberg Column 4 Lines 1-5, Column 6 Lines 10-65) At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings regarding peer-to-peer communications by Strandberg into the method of Hafez, such that the data collection components (i.e. agents) are able to exchange information with each other (i.e. other agents) and not just the central monitoring system (i.e. console). The suggested motivation for said combination would have been, as Hafez suggests (Hafez - Abstract), so that performance data may be summarized on several levels, where each summarization level is coarser in granularity

than the previous level. It would have been obvious to a person of ordinary skill in the networking art that the data captured by Strandberg on a per-hop basis, not just on an endpoint-to-endpoint basis, would provide an increased level of granularity that Hafez strives to obtain. Furthermore, since Hafez is presenting a network monitoring system that strives to predict network performance for hypothetical scenarios, it would have been obvious to combine Strandberg in order to allow the status information to be available at the ingress node before the traffic enters the network, thereby enhancing the response capabilities to dynamic network conditions (Strandberg - Column 1 Lines 50-55, Column 9 Lines 1-10).

Claims 8,9,10 are rejected on the same basis as Claim 4.

Hafez-Strandberg disclosed (re. Claim 6) providing one or more intelligence objects (IO) populating a network communicatively coupled to one or more nodes executing on one or more servers, computers, or other network components; (Hafez-Column 6 Lines 45-50, 'agents' and 'data collectors')

providing a composite value wherein said composite value (Hafez-Column 11 Lines 55-65, 'summarization') is derived from said providing one or more system level object's (SLO) (Hafez- Column 9 Lines 65-67,' system memory') that monitor and report on one or more network performance parameters in a host computer server;

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providing one or more transaction level objects (TLO) (Hafez-Column 10 Lines 1-5, 'independent and dependent transactions') that monitor transaction loads with respect to said host computer wherein said IO's are installed on each server. (Hafez-Column 6 Lines 25-30)

The Examiner notes that Hafez disclosed multiple data collectors for collecting system related and transaction related performance metrics.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hafez et al. (US Patent 6513065), in view of Strandberg et al. (US Patent 6647412), in view of what was well-known in the art.

Hafez-Strandberg disclosed (re. Claim 7) providing one or more intelligence objects (IO) populating a network communicatively coupled to one or more nodes executing on one or more servers, computers, or other network components; (Hafez-

Column 6 Lines 45-50, 'agents' and 'data collectors')

providing a composite value wherein said composite value (Hafez-Column 11 Lines 55-65, 'summarization') is derived from said providing one or more system level object's (SLO) (Hafez- Column 9 Lines 65-67,' system memory') that monitor and report on one or more network performance parameters in a host computer server;

providing one or more transaction level objects (TLO) (Hafez-Column 10 Lines 1-5, 'independent and dependent transactions') that monitor transaction loads with respect to said host computer wherein said IO's are installed on each server;

providing said localization values (Strandberg-Column 7 Lines 20-25) capable of being modified to a first composite utilization value; (Strandberg-Column 4 Lines 5-10) providing said first composite utilization value capable of being passed directly to a second composite utilization value communicatively coupled to a data record tag; (Strandberg-Column 4 Lines 5-10)

providing a plurality of tags and segments to said first and second composite utilization values such that a plurality of local utilization values, composite utilization values and initial local utilization values differentiate host data in a bi-directional relationship. (Strandberg-Column 6 Lines 30-40)

However Hafez-Strandberg did not disclose (re. Claim 7) representing said values in a binary value.

At the time of the invention it would have been well-known in the networking art that the binary format is common representation format for computer data.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hafez et al. (US Patent 6513065), hereinafter referred to as Hafez, in view of Strandberg et al. (US Patent 6647412), hereinafter referred to as Strandberg further in view of Waclawski (US Patent 6377907).

Hafez-Sandberg substantially disclosed the invention as follows.

Hafez-Sandberg disclosed (re. Claim 5) obtaining a plurality of characteristics or counters at a specific point in time (Hafez – Column 12 Lines 45-50) and combining counters. (Hafez-Column 10 Lines 15-20)

Hafez-Sandberg disclosed (re. Claim 5) wherein an intelligent object (IO) is installed on each server in the network in a peer-to-peer architecture, said IO's measuring real-time behavior of network components. (Hafez-Column 6 Lines 45-50, 'agents' and 'data collectors')

However Hafez-Sandberg did not disclose (re. Claim 5) counters that are combined through correlation matrixes and weighted sums, the correlation matrixes and weighted sums being updated over a period of time to reflect historical changes over the period of time.

Waclawski disclosed (re. Claim 5) counters that are combined through correlation matrixes (Waclawski-Column 8 Lines 60-65) and weighted sums (Column 11 Lines 20-25), the correlation matrixes and weighted sums being updated over a period of time to reflect historical changes over the period of time.

Hafez, Strandberg, and Waclawski are analogous art because they present concepts and practices regarding the capture and assessment of network performance measurements. At the time of the invention it would have been obvious to a person of ordinary skill in the networking art to combine the teachings of Waclawski into Hafez-Strandberg. The motivation for said combination would have been, as Waclawski

disclosed (Waclawski-Column 1 Lines 40), to provide a means for selecting the most significant performance metrics.

## Response to Arguments

Applicant's arguments filed 11/20/2006 have been fully considered but they are not persuasive.

Regarding the USC 101 rejection, the Applicant presents the following argument(s) [in italics]:

LNV and CNV allow a user to analyze network device performance and resource utilization in a peer-to-peer, real-time relationship, without a multi-tier polling data collection process.

The Examiner respectfully maintains the USC 101 rejection. While the Applicant has amended the claims to show the intended use of said integer values, there is no method step included in the claims that describes said intended use.

The Applicant presents the following argument(s) [in italics]:

Hafez, falls short in passing node values peer-to-peer throughout a multi-tiered network in real-time. Nor does combining <u>Strandberg</u> with Hafez yield applicant's

claimed functionality in amended claims 4-5. The cited combination, unlike applicant's amended claims 4-5, does not allow a user to pass node values bi-directionally, in real-time, and adjusted for dynamic changes in the network.

The Examiner respectfully disagrees with the Applicant. Hafez-Sandberg disclosed passing node values bi-directionally, in real-time, and adjusted for dynamic changes in the network as shown in the rejection. The Examiner notes that the ingress and egress nodes disclosed by Sandberg are interchangeable at any point in time, said ingress and egress attribute depending of the direction traffic flow.

#### Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure

relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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